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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,100	12/21/1999	KNUT S. GRIMSRUD	10559/111001	7001

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EXAMINER

ELMORE, STEPHEN C

ART UNIT PAPER NUMBER

2186

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

TR

Office Action Summary

Application N .

09/471,100

Applicant(s)

GRIMSRUD, KNUT S.

Examin r

Stephen C. Elmore

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-12, 19-24 and 29-45 is/are allowed.
- 6) ☒ Claim(s) 1, 13 and 25 is/are rejected.
- 7) ☒ Claim(s) 2-6, 14-18 and 26-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-45 are presented for examination.

Drawings

2. The objections to the drawings are withdrawn due to the applicant's response.

Claim Objections

3. The objection to claim 6 as being improperly dependent upon itself is withdrawn due to the amendment.

Specification

4. The objections to the specification are withdrawn due to the amendment.

Claim Rejections - 35 USC § 112

5. The rejections based on 35 USC 112, first paragraph are withdrawn due to the applicant's response.

Claim Rejections - 35 USC § 102

6. The rejection of claims 1, 13 and 25 is maintained but updated and given below to reflect the changes due to the amendment.
7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1, 13 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Parks et al., USPN 5,473,761.

Parks teaches the claimed apparatus and method of reading data from a storage medium, and computer program that cause a computer to perform the method (claims 1, 13, and 25) comprising:

claim 1,

reading data on the storage medium in response to a command is taught as the read portion of the servicing of an I/O request from the Host, col. 20, line 63, (also see col. 20, line 46- col. 22, line 22), the data comprising prefetch data and demand data is taught as a readahead strategy which prefetches data in addition to the requested or demand data (e.g., see col. 7, lines 25-27), and storing the demand data in a region of memory is taught, as putting the read data in the allocated buffer memory, col. 2, lines 6-7, and teaches issuing an interrupt after the demand data has been stored in memory is taught as “when the disk drives complete the read...it issues an interrupt,” col. 22, lines 5-7;

claims 13 and 25,

Parks teaches the above method as claimed by claims 13 and the claimed apparatus as claimed by 25 because the above method is being performed by the apparatus of a processor executing instructions which accomplish the read, store, and interrupt activities.

Allowable Subject Matter

9. Claims 7-12, 19-24, 29-30 are allowed over the prior art of record.

10. Claims 2-6, 14-18 and 26-28 are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

11. Newly added claims 31-45 are allowed over the prior art of record.

Response to Applicant's Remarks

12. Applicant's arguments filed July 10, 2002 have been fully considered but they are not persuasive.

13. As to the applicant's arguments that the reference does not teach reading both prefetch and demand data, Parks teaches reading and storing the data the processor needs for a particular processing function along with additional data to the actual address required. Parks teaches this concept as a read-ahead function or as lookahead operations. This limitation is taught to the extent actually claimed.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen C. Elmore whose telephone number is (703) 308-6256. The examiner can normally be reached on Mon-Fri from 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt M. Kim can be reached on (703) 305-3821. The fax phone numbers for the organization where this

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application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Stephen Elmore
Examiner
Art Unit 2186
October 1, 2002



MATTHEW KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100